

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

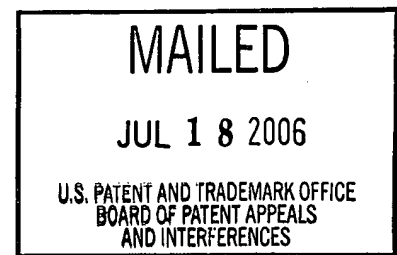
**UNITED STATES PATENT AND TRADEMARK OFFICE**

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Ex parte STEWART PATON, and IAN RICHARD SCOTT

Appeal No. 2006-1801  
Application No. 10/007,869

ON BRIEF



Before ADAMS, GRIMES, and LEOVITZ, Administrative Patent Judges.

LEOVITZ, Administrative Patent Judge.

**DECISION ON APPEAL**

This appeal involves claims to skin care products containing retinoids and retinoid boosters. The examiner has rejected the claims as obvious over prior art. We have jurisdiction under 35 U.S.C. § 134. We reverse the rejection, but enter a new ground of rejection of all claims as indefinite under 35 U.S.C. § 112, second paragraph.

**Background**

Retinoic acid is known to be effective in treating a variety of skin conditions, including acne, wrinkles, psoriasis, and discolorations. Specification, page 1. The application describes skin care products which contain retinoic acid precursors (retinal, retinol, and retinyl esters) combined with "retinoid boosters," compounds known to

increase the activity of the retinoid precursors by promoting their conversion to retinoic acid. When the boosters were combined with the retinoids in a single composition, they were found to cause retinoid degradation. Id., page 30, lines 5-6; page 36. As a consequence, the “efficacy of the boosted composition” was reduced. Id., page 30, lines 5-6. “Therefore, in order to protect against retinoid breakdown while still providing the beneficial effects of retinoid boosters, the present invention provides a dual compartment package that contains a first composition containing retinoids in a first compartment and a second composition containing at least one retinoid booster in a second compartment. The first composition provides a first benefit to the skin while the second composition works to boost or enhance the effect of the first benefit.” Id., page 30, lines 8-13.

### Discussion

#### 1. Claim construction

Claims 1, 2, 4-7, 9-12, and 14-18 are on appeal. Claim 16 has been argued separately, and does not stand or fall with the other claims. See, Reply Brief, page 15. We will focus on claim 1, the broadest claim on appeal. It reads as follows:

1. A stable skin care product comprising:

a first composition comprising about 0.001% to about 10% of a retinoid selected from the group consisting of retinyl esters, retinol, retinal, and mixtures thereof;

a second composition comprising about 0.0001% to about 50% of at least one retinoid booster selected from the group consisting of CITRAL, CITRONELLOL, COCAMIDE DEA, DAMASCONE, GERANIOL, 18b GLYCERHETINIC ACID, 8

OH QUINOLINE, N LAURY<sup>1</sup> SARCOSINE, LINALOOL, ALPHA IONONE and LINSEED OIL;

a first compartment for storing the first composition, wherein the first compartment keeps the first composition out of contact with oxygen; wherein the first compartment is made out of aluminum; and

a second compartment for storing the second composition, the first and second compartments being joined together;

thereby avoiding chemical degradation of said first composition that would be caused by contact with said second composition.

Since claim 16 was argued separately, it is reproduced below, along with independent claim 11 upon which it depends.

11. A stable skin care product comprising:

a first composition comprising about 0.001% to about 10% of a retinoid to provide a first benefit; said retinoid selected from a group consisting of retinyl esters, retinol, retinal, and mixtures thereof, a second composition comprising about 0.0001% to about 50% of at least one retinoid booster to boost the first benefit, said retinoid booster selected from the group consisting of CITRAL, CITRONELLOL, climbazole, COCAMIDE DEA, DAMASCONE, GERANIOL, 18b GLYCERHETINIC ACID, 8 OH QUINOLINE, N LAURY SARCOSINE, LINALOOL, ALPHA IONONE and LINSEED OIL;

a first compartment for storing the first composition, wherein the first compartment keeps the first composition out of contact with oxygen, and a second compartment for storing the second composition, wherein the second compartment keeps the second composition out of contact with oxygen, wherein the first and second compartments are made out of aluminum; and wherein the first and second compartments are joined together,

thereby avoiding chemical degradation of said first composition that would be caused by contact with said second composition.

16. The stable skin care product according to claim 11, wherein said retinoid booster is Climbazole, and wherein said product further comprises a second

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<sup>1</sup> N-Lauryl Sarcosine is a surfactant. It is not clear from the application whether "Laury" is a typographical error, or whether "Lauryl" was intended.

retinoid booster selected from the group consisting of alpha-ionone, damascenone, and mixtures thereof.

It is clear from reading the application that the claimed “stable skin care product” is for use by a consumer in applying to skin. For example, the stability problem described in the application results when cosmetic formulations are prepared for direct consumer use. See, e.g., Specification, pages 1-3. See, also, where the product is disclosed as containing cosmetically acceptable vehicles to facilitate the product’s distribution over the skin. *Id.*, page 31, lines 15-21.

The product of claim 1 comprises a first composition in a first compartment, and a second composition in a second compartment. The second composition comprises one of several specific “retinoid boosters.” The compartments are “joined together.”

The claim recites a “thereby clause,” indicating that placing the first retinoid composition in a different container from the second booster composition is “avoiding chemical degradation of said first composition that would be caused by contact with said second composition.” This is a result. Generally, if a limitation only states the result of the claim limitations, it does not constitute a limitation itself. Texas Instruments Inc. v. U.S. Intern. Trade Com’n, 988 F.2d 1165, 1172, 26 USPQ2d 1018, 1023 (Fed. Cir. 1993). Thus, we do not construe the claim to be limited to compartmentalizing compositions for the purpose of avoiding retinoid degradation.

Claim 11 is similar to claim 1, but also recites “Climbazole” as a retinoid booster. Claim 16 requires the presence of two retinoid boosters. Methods of using the compositions are also claimed.

2. Rejection under 35 U.S.C. § 103

Claims 1, 2, 4-7, 9-12, and 14-18 stands rejected under 35 U.S.C. § 103(a), as unpatentable over Burger<sup>2</sup> and Granger<sup>3</sup> in view of Liu<sup>4</sup> and Soares<sup>5</sup> and Remington<sup>6</sup>.

Each of Burger and Granger describes compositions for application to the skin which contain retinoids in combination with other components that enhance retinoid activity. See, Examiner's Answer, pages 4-5. Retinoid and booster concentrations are disclosed in Burger (e.g., column 2, lines 61-65, and column 2, lines 3-7, respectively). Several of the boosters recited in instant claim 1 are disclosed, e.g., damascone (Burger, column 3, line 45), alpha ionone (Burger, column 3, lines 46), and climbazole (Granger, column 4, lines 19), but as residing in the same composition as the retinoid.

The problem of retinoid stability in preparing skin cosmetics is described in Liu. Several approaches to resolving it are disclosed, including supplying components in separate containers which are combined just prior to use (Liu, column 2, lines 60-61) and formulating retinoid in an oil-in-water emulsion (Liu, column 3, lines 15-20). Appellant admitted these to be prior art in their own application. See, e.g., Specification, page 1, line 27-page 3, line 15. Aluminum packaging is mentioned by Liu as a way to protect retinoids from degradation. Liu, column 12, lines 50-55. (Compare claim 1: "first compartment for storing [retinoid] is made out of aluminum.") The examiner relied upon Remington for this teaching, but this was unnecessary since it was redundant to Liu's disclosure.

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<sup>2</sup> Burger et al. (Burger) U.S. Patent No. 5,759,556 issued Jun. 2, 1998

<sup>3</sup> Granger et al. (Granger) U.S. Patent No. 5,716,627 issued Feb. 10, 1998

<sup>4</sup> Liu et al. (Liu) U.S. Patent No. 5,976,555 issued Nov. 2, 1999

<sup>5</sup> Soares et al. (Soares) U.S. Patent No. 5,914,116 issued Jun. 22, 1999

<sup>6</sup> Remington's Pharmaceutical Sciences (1990) p. 1511-1512

Suares discloses multi-compartment containers for skin care products. Suares, column 2, lines 4-18. Included in the examples are retinoid compositions stored in compartments that are separate, but joined to, compartments containing cleansers and sunscreens. Id., Column 3, lines 28-60.

The examiner acknowledges that neither Burger nor Granger discloses the retinoid and booster in separate compartments, but, citing the disclosures by Liu and Suares, alleges that “one of ordinary skill in the art would have found it obvious to employ two compartments ... in order to preserve the stability of retinoids and avoid chemical degradation prior to use ...” See, e.g., Examiner’s Answer, pages 6 and 17.

To establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicants. See, e.g., In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1316-1317 (Fed. Cir. 2000). The question for the purposes of this appeal is whether there would have been motivation to have placed a retinoid composition in a container which is separate from a container comprising any one of the booster compounds recited in the claims of this appeal.

The examiner leaned heavily on the disclosure in Liu that, in an attempt to formulate stable retinoid compositions, skin care products had been supplied “in two bottles, portions of which are mixed together just prior to use.” Column 2, lines 59-61. See, also, Examiner’s Answer, page 18. This was identified as the motivation to create a two-compartment system for storing the retinoid separate from other chemicals, such as the arrangement described in Suares. The problem with Liu’s disclosure is that it does not teach or suggest that the specific booster chemicals recited in claim 1 cause

retinoid degradation. It was apparently assumed in the Examiner's Answer (e.g., page 17) that Liu's statements (column 2, lines 59-61; column 3, lines 15-20) that retinoids undergo "chemical degradation" and "quickly lose their activity and either oxidize or isomerize to non-efficacious chemical forms," form a general teaching or recognition that all chemicals are deleterious to retinoid stability. In other words, the examiner read "chemical degradation" to mean "degradation of retinoid caused by any chemical." However, this reading is not correct.

Liu describes stabilizing retinoids against "chemical degradation," but does not explicitly define it in the patent. In column 12, Liu characterizes light and oxygen mediated breakdown (degradation) of the retinoid molecule. This indicates that the phrase "chemical degradation" is not restricted to processes where chemicals degrade retinoid, but rather also refers to the degradation of retinoid, which itself is a chemical molecule.

There is no general teaching in Liu that all chemicals are deleterious to retinoids. On column 24, lines 59-67, Liu describes incorporating azole-type compounds into retinoid formulations. With respect to imidazoles, a class of azoles, Liu states that "nitrate or other salt forms of the imidazoles should not be used, however, as they tend to render unstable the retinoids contained in the formulations." Any generalization about the ability of chemical compounds as a class to produce retinoid degradation is surely tempered by Liu's disclosure cautioning against the use of particular salt forms of imidazoles, but not against all imidazole compounds.

In Soares, a multi-compartment container is described for storing a retinoid skin composition ("Anti-acne preparation"; "Anti-wrinkle cream") separate from another skin

cosmetic composition (e.g., “Cleanser”; “Sunscreen”). See, e.g., Suares, column 3, Table 1. Other combinations of compositions, each in a separate compartment, are also discussed. Id., column 3, lines 48-60. The examiner alleged that, in view of Liu’s “two bottle” disclosure, Suares provides the motivation to have placed the boosters recited in claims 1, 11, and 16 into the “second compartment.” But, missing is the logic that would have led the skilled worker to have compartmentalized the specifically named boosters away from the retinoid composition. Suares discusses general purposes for keeping the compositions separate (e.g., “single formulations often compromise the performance of the severally combined actives”; to facilitate use of multiple compositions in a skin treatment regime), but these do not suggest the booster components named in claims 1, 11, and 16. See, Id., Abstract; column 1, lines 15-20; column 7, lines 64-column 8, line 6. This is not a case where the appealed claims are so broad as to include any chemical compound in the second composition.

We are cautioned against the use of “hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.” Ecolochem, Inc. v. Southern Calif. Edison Co., 227 F.3d 1361, 1371, 56 USPQ2d 1065, 1072 (Fed. Cir. 2000) (quoting In re Fine, 837 F.2d 1071, 1075, 5 USPQ2d 1780, 1783 (Fed. Cir. 1988)). The combination of references cited in the rejection does not provide the requisite motivation. Accordingly, the rejection is reversed.

#### Other issues

The claims, as we have construed them, do not require compartmentalizing the first and second compositions to avoid chemical degradation of the first composition.



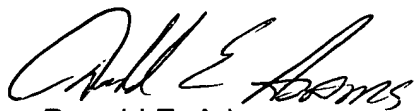
Because the claims do not require this purpose, any reason to have isolated the retinoid from the booster would suffice. In re Dillon, 919 F.2d 688, 693, 16 USPQ2d 1897, 1901 (Fed. Cir. 1990), the court held “it is not necessary in order to establish a prima facie case of obviousness . . . that there be a suggestion or expectation from the prior art that the claimed [invention] will have the same or a similar utility as one newly discovered by applicant.”

In reviewing the Examiner’s Answer, it appears that the “avoiding retinoid degradation” limitation may have been read into the claims. If so, the relevance of prior art could have been erroneously dismissed. For example, Soares discloses sunscreen, cleansers, anti-acne, and anti-wrinkle compositions in conjoined containers. While the sunscreens and cleansers do not have the specific components recited in claim 1 and others, they do have surfactants (detergents) and fragrances. See, e.g., Soares, column 4, lines 65-67; column 8, Tables II; column 9, Table VI. A surfactant (N laury sarcosine) and fragrance (e.g., citronellol and linolool) are recited in claim 1. Prior to final disposition of this application, the examiner may wish to consider whether there is prior art teaching cleansers or sunscreen compositions (e.g., which contain at least one of the components recited in claims 1, 11, or 16) that would make the claims unpatentable in combination with Soares.

Summary

The rejection of claims 1, 2, 4-7, 9-12, and 14-18 over prior art is reversed.

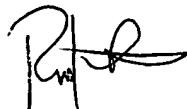
REVERSED



Donald E. Adams  
Administrative Patent Judge



Eric Grimes  
Administrative Patent Judge



Richard M. Lebovitz  
Administrative Patent Judge

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